Maryland Rehab Code Chapter 1. Administration

101.0 Purpose and Intent

- 101.1 The purpose of this code is to encourage the continued use or reuse of legally existing buildings and structures. This code is intended to permit repairs, renovations, modifications, reconstructions, additions, and/or changes of occupancy that maintain or improve the health, safety and welfare in existing buildings, without requiring full compliance with the Building Code, Mechanical Code, Plumbing Code, Fire Prevention Code, Electrical code, Boiler Safety Code, Energy Code, Elevator Code, or Accessibility Code, except for proportional additional work as specified in this code.
- **101.2** All work shall be classified into six categories: repair, renovation, modification, reconstruction, addition, and change of occupancy. Specific requirements are established for each work category in this code.
- **101.3** Work of more than one category may be part of a single work project. All related work permitted within a twelve-month period shall be considered a single work project.
 - **101.3.1** Where a project includes one category of work in one building area and another category of work in a separate and unrelated area of the building, each project area shall comply with the requirements of the respective category of work.
 - **101.3.2** Where a project with more than one category of work is performed in the same area, or in related areas of the building, the project shall comply with the requirements of the more stringent category of work.

102.0 Compliance

- **102.1** Repairs, renovations, alterations, reconstruction, additions, and changes of occupancy shall conform to the requirements of this code.
- **102.2 Equivalent Alternatives**: This code is not intended to prevent the use of any alternate material, alternate design or alternate method of construction not specifically prescribed herein, provided any alternate has been deemed to be equivalent and its use authorized by the authority having jurisdiction.
- **102.3 Other Alternatives**: Where compliance with this code or with any other Code as required by this code is technically infeasible or would impose undue hardship because of structural, construction or dimensional difficulties, other alternatives may be accepted by the authority having jurisdiction. These alternatives may include materials, design features and/or operational features.
- **102.4** Buildings or systems in compliance with the current edition of the Building Code, Mechanical Code, Plumbing Code, Fire Prevention Code, Electrical code, Boiler Safety Code, Energy Code, Elevator Code, or Accessibility Code shall not be required to comply with any more restrictive requirement of this code.
- 102.5 Elements, components and systems of existing buildings with features that exceed the requirements of the codes for new construction and not otherwise required as part of approved alternative arrangements, or deemed by the authority having jurisdiction to be required to balance other building elements not complying with the codes for new construction shall not be prevented by this code from being modified as long as they remain in compliance with the applicable codes for new construction.

103.0 Nonconforming Rights (Existing Buildings)

103.1 Buildings in existence at the time of the adoption of this code may have their existing use or occupancy continued, if such use or occupancy was legal at the time of the adoption of this code, provided such continued use

is not hazardous to life. Nothing in this code shall be interpreted as requiring the repair, renovation, modification or reconstruction of such existing buildings.

104.0 Relationship to Other Codes, Rules, and Ordinances

- **104.1** It is not the intent of this code to supersede any codes or ordinances that address dangerous or unsafe buildings.
- 104.2 It is not the intent of this code to supersede any retroactive regulations that impose stricter requirements.
- **104.3** It is not the intent of this code to supersede the Minimum Livability Code by establishing minimum standards of habitability for housing, .
- 103.4 Work mandated by any property, housing, or fire prevention code, or mandated by any licensing rule or ordinance, adopted pursuant to law, shall conform only to the requirements of that code, rule, or ordinance and shall not be required to conform to this code unless the code requiring such work so provides.

105.0 Preliminary Meeting

105.1 If a building permit is required then at the request of the prospective permit applicant, the authority having jurisdiction or his designee, and representatives from all necessary agencies, shall meet together if possible with the prospective applicant to discuss plans for any proposed work or change of occupancy under this code prior to the application for the permit. The purpose of this preliminary meeting is for the authority having jurisdiction to gain an understanding of the prospective applicant's intentions for the proposed work, and to determine, together with the prospective applicant, the specific applicability of this code.

106.00 Evaluation of an Existing Building

- 106.1 The authority having jurisdiction may require an existing building to be investigated and evaluated by a registered design professional in the case of proposed reconstruction of any portion of a building, changes of use, additions, and upon other circumstances agreed upon at the preliminary meeting. The evaluation shall determine the existence of any potential non-conformities with this code, and shall provide a basis for determining the impact of the proposed changes on the performance of the building. The evaluation shall utilize the following sources of information, as applicable:
 - ° Available documentation of the existing building.
 - ° Field surveys.
 - ° Tests (nondestructive and destructive).
 - ° Laboratory analysis.

Exception:

1. Simple detached one- or two-family dwellings that are not undergoing an extensive reconstruction or a change of occupancy.

107.0 Permits

107.1 The work area, as defined in Chapter 2, shall be clearly identified on all permits required by the authority having jurisdiction.

1.108Appeals

108.1 Any appeal of issues under this code shall be subject to the existing appeals process of the authority having jurisdiction.

Maryland Rehab Code Chapter 2. Definitions

201.0 General

201.1 The words and terms used in this code shall have the following meanings unless the context clearly indicates otherwise. Any term not defined herein which is defined in any other code applicable to this code shall have the meaning as defined in that code. Where a term is defined in this code and is also defined in another code, then the term shall have the meaning as defined herein wherever it is used in this code. Words used in the present tense include the future. Words in the masculine gender include the feminine and neuter. The singular number includes the plural and the plural number includes the singular.

202.0 Definitions

Accessibility Code: Art. 83B §6-102 and the regulations promulgated thereunder.

Boiler Safety Code: Art. 48 §§167 – 180A and the rules and regulations promulgated thereunder.

Building Code: Art. 83B §6-401 et. sec. and the regulations promulgated thereunder.

Categories of work: The nature and extent of construction work undertaken in an existing building. The following categories of work entail increased requirements respectively:

Repair: The patching, restoration, and/or minor replacement of materials, elements, components, equipment and/or fixtures for the purposes of maintaining such materials, elements, components, equipment and/or fixtures in good or sound condition.

Renovation: The change, strengthening or addition of load bearing elements, the refinishing, replacement, bracing, strengthening, upgrading or extensive repair of existing materials, elements, components, equipment and/or fixtures. Renovation involves no reconfiguration of spaces. Interior and exterior painting are not considered refinishing for purposes of this definition, and are not renovations.

Modification: The reconfiguration of any space, the addition or elimination of any door or window, the reconfiguration or extension of any system, or the installation of any additional equipment.

Reconstruction: The reconfiguration of a space which affects an exit, or element of the egress access shared by more than a single tenant; or renovation and/or modification when the work area is not permitted to be occupied because existing means of egress and fire protection systems, or their equivalent, are not in place or continuously maintained; and/or extensive modifications as defined in Chapter 5 of these provisions.

Change of occupancy: A change in the purpose or level of activity within a structure that involves a change in application of the requirements of the Building Code or of this code.

Addition: An increase in building area, aggregate floor area, height or number of stories of a structure.

Dangerous: Where the stresses in any member, the condition of the building or any of its components or elements or attachments, or other condition that results in an overload exceeding 150% of the stress allowed for the member or material in the Building Code.

Electrical Code: Art. $38A \S 59 - 66$, the National Electrical Code or the electrical code adopted by a county or Baltimore City for that county or Baltimore City.

Elevator Code: Art. 89 §49B and the rules and regulations promulgated thereunder.

Energy Code: PUC §§7-401(e), as adopted by regulation pursuant to Art.83B §6-402.

Equipment or fixture: Any plumbing, heating, electrical, ventilating, air conditioning, refrigerating and fire protection equipment, and elevators, dumb waiters, escalators, boilers, pressure vessels and other mechanical facilities or installations, which are related to building services. Equipment or fixture shall not include manufacturing, production or process equipment, but shall include connections from building service to process equipment.

Existing building: Any building or structure erected prior to the adoption of the current Building Code of the jurisdiction and that has been issued a certificate of occupancy or has been legally occupied.

Fire Prevention Code: Art.38A §3, §12A (smoke detection), §12B (sprinklers) and the regulations promulgated thereunder.

Historic building: Any building or structure that is (a) listed or eligible for listing in the National Register of Historic Places, (b) designated as a historic property under local law, or (c) certified as a contributing resource within a National Register listed or locally designated historic district.

Load bearing element: Any column, girder, beam, joist, truss, rafter, wall, floor or roof sheathing which supports any vertical load in addition to its own weight, and/or any lateral load.

Materials and methods requirements: Those requirements in the Building Code, Mechanical Code, Plumbing Code, Fire Prevention Code, Electrical code, Boiler Safety Code, Energy Code, Elevator Code, or Accessibility Code that specify material standards, details of installation and connection, joints, penetrations and continuity of any element, component or system in the building. The required quantity, fire resistance, flame spread, acoustic or thermal performance, or other performance attribute is specifically excluded from materials and methods requirements.

Mechanical Code: BR §9A-205 and the rules and regulations promulgated thereunder.

Plumbing Code: BOP §12-101(1) and 12-205.

Rehabilitation: Any work, as described by the categories of work defined herein, undertaken in an existing building.

Technically infeasible: A change to a building that has little likelihood of being accomplished because the existing structural conditions require the removal or alteration of a load-bearing member that is an essential part of the structural frame, or because other existing physical or site constraints prohibit modification or addition of elements, spaces or features which are in full and strict compliance with applicable requirements.

Use group: The classification of an occupancy in accordance with the Building Code.

Work area: That portion of a building affected by any renovation, modification or reconstruction work as initially intended by the owner and indicated as such in the permit. Work area excludes other portions of the building where incidental work entailed by the intended work must be performed, and portions of the building where work not initially intended by the owner is specifically required for a renovation, modification or reconstruction as per Chapters 4, 5 and 6 of this code, respectively.

Maryland Rehab Code Chapter 3. Repairs

301.0 General

- **301.1** Repairs, as defined in Chapter 2, shall comply with the requirements of this Chapter. Exception:
 - 1. As modified in Chapter 9 for repairs in historic buildings.

302.0 Requirements

- **301.1** Except as is otherwise required herein, work shall be done using like materials, or materials permitted by the Building Code, Mechanical Code, Plumbing Code, Electrical Code, Boiler Safety Code or Elevator Code as applicable.
 - 302.1.1 Hazardous materials no longer permitted, such as asbestos and lead-based paint, shall not be used.
 - **302.1.2** The following plumbing materials and supplies shall not be used:
 - 1. All purpose solvent cement;
 - 2. Flexible traps and tailpieces;
 - 3. Sheet and tubular copper and brass trap and tailpiece fittings less than B&S 17 gauge (.045 inch); and
 - 4. Solder having more than 0.2% lead in the repair of potable water systems.
 - **302.1.3** When any water closet, urinal, lavatory faucet, kitchen faucet or shower head is replaced, the replacement fixture shall comply with the water conservation requirements of the Plumbing Code.
 - **302.1.4** Replacement glazing in hazardous locations shall comply with the Safety Glazing requirements of the Building Code.
- **302.2** The work shall cause no diminution of structural strength.
- **302.3** The work shall not make the building less conforming with the Building Code, Mechanical Code, Plumbing Code, Fire Prevention Code, Electrical Code, Boiler Safety Code, Energy Code, Elevator Code, or Accessibility Code, or with any previously approved alternative arrangements, than it was before the repair was undertaken.
- **302.4 Electrical** Existing electrical wiring and equipment undergoing repair shall be allowed to be repaired or replaced with like material.

- 1. Replacement of electrical receptacles shall comply with the applicable requirements of the Electrical Code.
- 2. Plug fuses of the Edison-base type shall be used for replacements only where there is no evidence of over fusing or tampering per applicable requirements of the Electrical Code.
- 3. For replacement of non-grounding-type receptacles with grounding-type receptacles and for branch circuits that do not have an equipment grounding conductor in the branch circuitry, the grounding conductor of a grounding type receptacle outlet shall be permitted to be grounded to any accessible point on the grounding electrode system, or to any accessible point on the grounding electrode conductor, as allowed and described in applicable sections of the Electrical Code.
- 4. Non-"hospital grade" receptacles in patient bed locations of Use Group I-2 shall be replaced with "hospital grade" receptacles, as required by NFPA 99.
- 5. Frames of electric ranges, wall-mounted ovens, counter-mounted cooking units, clothes dryers, and outlet or junction boxes that are part of the existing branch circuit for these appliances shall be

permitted to be grounded to the grounded circuit conductor if all the applicable conditions of the Electrical Code are met.

302.5 Mechanical

301.4.1 Defective material or parts shall be replaced or repaired in such a manner so as to preserve the original approval or listing.

301.4.2 Temporary repairs may not be made to a damaged heat exchanger.

R

A

F

Maryland Rehab Code Chapter 4. Renovations

401.0 General Requirements

- **401.1** Renovations, as defined in Chapter 2, shall comply with the requirements of this Chapter. Exception:
 - 1. As modified in Section 904.0 for historic buildings.
- 401.2 All new work shall comply with the materials and methods requirements, as defined in Chapter 2
- **401.3** The work shall not make the building less conforming with the Building Code, Mechanical Code, Plumbing Code, Fire Prevention Code, Electrical Code, Boiler Safety Code, Energy Code, Elevator Code, or Accessibility Code, or with any previous approved alternative arrangements, than it was before the renovation was undertaken.

Exception:

1. Minor reductions in the clear opening dimensions of replacement doors and windows that result from the use of different materials shall be allowed, unless prohibited by the Accessibility Code.

402.0 Additional Requirements

- **402.1** New wood paneling and textile wall coverings used as an interior finish shall comply with the flame spread requirements of the Building Code or the Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.
- **402.2** New carpeting used as an interior floor finish material shall comply with the radiant flux requirements of the Building Code or the Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.

403.0 Structural Requirements

Reserved.

404.0 Accessibility

- **403.1** Buildings undergoing renovation shall comply with Section .07 A.(3), B., and C. of the Accessibility Code. Exceptions:
 - 1. Reroofing.
 - 2. Changes to mechanical and electrical systems that do not affect the usability of the building or facility.

405.0 Plumbing

404.1 Discharge

- **405.1.1** In areas where public sanitary sewers are not available, existing structures that are being renovated shall either permanently plug all existing floor drains, or retrofit all existing floor drains so as to allow them to flow into and approved sand interceptor which shall drain into a 1,000 gallon or larger approved holding tank.
- **405.1.2** An oil and water separator is not required when the waste discharges into a holding tank.
- **405.1.3** Any renovation of an existing structure that discharges liquid wastes as described in Section 6.1.1 of the Plumbing code or which discharges other industrial waste waters shall have the option of discharging

into an on-site subsurface disposal system, providing the facility's owner/operator applies for and obtains from the Maryland Department of Environment a water discharge permit issued pursuant to the provisions of COMAR 26.08.01-26.08.04.

Maryland Rehab Code Chapter 5. Modifications

501.0 General Requirements

- **501.1** Modifications, as defined in Chapter 2, shall comply with the requirements of this Chapter. Exception:
 - 1. As modified in Section 904.0 for historic buildings.
- **501.2** Work shall comply with all the requirements of Chapter 4.
- 501.3 All newly constructed elements, components and systems shall comply with the requirements of the Building Code, Mechanical Code, Plumbing Code, Fire Prevention Code, Electrical Code, Boiler Safety Code, Energy Code, Elevator Code, or Accessibility Code.

Exceptions:

- 1. Openable windows may be added without requiring compliance with the light and ventilation requirements of the Building Code.
- 2. Newly installed electrical equipment shall comply with the requirements of Section 504.0.
- **501.4** The modification work shall not increase the extent of non-compliance with the requirements of Chapter 6 of this code or create a non-conformity with those requirements that did not previously exist.

501.5 Extensive Modifications

501.5.1 The modification of an entire building or an entire occupancy within a building shall be considered as a reconstruction and shall comply with the requirements of Chapter 6 of this code for the applicable Use Group.

Exception:

- 1. Modification work that is exclusively plumbing, mechanical, fire protection system or electrical shall not be considered a reconstruction, regardless of its extent.
- **501.5.2** When the total area of all the work areas included in a modification exceeds 50 percent of the area of the building the work shall be considered as a reconstruction and shall comply with the requirements of Chapter 6 of this code for the applicable Use Group. Exception:
- 1. Work areas in which the modification work is exclusively plumbing, mechanical, fire protection system or electrical shall not be included in the computation of total area of all work areas.

502.0 Structural Requirements

502.1 The minimum design loads for the structure shall be the loads applicable at the time the building was constructed, provided that no dangerous condition is created. Structural elements which are uncovered during the course of the modification and which are found to be unsound or dangerous, shall comply with the applicable requirements of the Building Code.

503.0 Accessibility

503.1 Modifications shall comply with Section 404.0.

504.0 Electrical Equipment and Wiring

504.1 All newly-installed electrical equipment and wiring relating to work done in any work area shall comply with the materials and methods requirements as defined in Chapter 2.

- 1. Electrical equipment and wiring in newly installed partitions and ceilings shall comply with all applicable requirements of the Electrical Code.
- **504.2** Existing wiring in all work areas in Use Groups A-1, A-2, A-5, H, and I shall be upgraded to meet the materials and methods requirements as defined in Chapter 2.
- **504.3 Service and/or Feeder in Use Groups R-2, R-3 and R-4**: Service to existing dwelling units in any work area shall be a minimum of one hundred ampere, three-wire capacity, and service equipment shall be dead front having no live parts exposed whereby accidental contact could be made. Type "S" fuses shall be installed when fused equipment is used.

- 1. Existing service of sixty ampere three-wire capacity, and feeders of thirty ampere or larger two- or three-wire capacity, shall be accepted if adequate for the electrical load being served.
- **504.4** In Use Groups R-2, R-3 and R-4, when the work area includes any of the following areas within a dwelling unit, the following requirements shall apply:
 - **504.4.1** All enclosed areas, other than closets, kitchens, basements, garages, hallways, laundry areas and bathrooms shall have a minimum of two duplex receptacle outlets or one duplex receptacle outlet and one ceiling or wall type lighting outlet.
 - **504.4.2** Kitchen areas shall have a minimum of two duplex receptacle outlets.
 - **504.4.3** Laundry areas shall have a minimum of one duplex receptacle outlet located near the laundry equipment and installed on an independent circuit.
 - **504.4.4** Ground fault circuit interruption shall be provided on newly installed receptacle outlets if required by the Electrical Code.
 - **504. 4.5** At least one lighting outlet shall be provided in every bathroom, hallway, stairway, attached garage and detached garage with electric power, and to illuminate outdoor entrances and exits.
 - **504.4.6** At least one lighting outlet shall be provided in utility rooms and basements where these spaces are used for storage or contain equipment requiring service.
 - **504.4.7** Clearance for electrical service equipment shall be provided in accordance with the Electrical Code.

505.0 Plumbing Fixtures

505.1 Where the work area is more than 20 percent of the floor area, and the authority having jurisdiction determines that the occupant load will be increased by at least 20 percent as a result of the modification, plumbing fixtures in all work areas shall be provided in quantities specified in the Plumbing Code based on the increased occupant load.

506.0 Mechanical

- **506.1** All reconfigured spaces intended for occupancy and all spaces converted to habitable or occupiable space in any work area shall be provided with either natural or mechanical ventilation.
 - **506.1.1** Natural ventilation shall comply with the requirements of the Mechanical Code.
 - **506.1.2** Newly-installed mechanical ventilation systems shall comply with the requirements of the Mechanical Code.

1. Existing mechanical ventilation systems shall comply with the requirements of Section 506.2.

506.2 In mechanically ventilated spaces, existing mechanical ventilation systems that are altered, reconfigured or extended shall provide not less than 5 cubic feet per minute (cfm) per person of outdoor air and not less than 15 cfm of ventilation air per person; or not less than the amount of ventilation air determined by the Indoor Air Quality Procedure of ASHRAE 62-99.

506.3 All newly-introduced devices, equipment or operations that produce airborne particulate matter, odors, fumes, vapor, combustion products, gaseous contaminants, pathogenic and allergenic organisms, and microbial contaminants in such quantities to adversely affect or impair health, or cause discomfort to occupants shall be provided with local exhaust.

A

F

Maryland Rehab Code Chapter 6. Reconstruction

601.0 General

- **601.1** Reconstruction work, as defined in Chapter 2, shall comply with the requirements of this Chapter. Exception:
 - 1. As modified in Section 904.0 for historic buildings.
- **601.2** Work shall comply with all the requirements of Chapters 4 and 5.

Exceptions:

- 1. Buildings in which the reconfiguration of space affecting exits and/or shared egress access is exclusively the result of compliance with the accessibility requirements of Section 404.1 shall not be required to comply with this Chapter.
- 2. Existing dead end corridors may be extended and new dead end corridors may be added in accordance with Section 602.5.

602.0 Means of Egress

- **602.1** General: The means of egress shall comply with the requirements of this section. Exception:
 - 1. Where the work area and the means of egress serving the work area complies with NFPA 101.

602.2 Number of Exits

602.2.1 Every story utilized for human occupancy on which there is a work area shall be provided with the minimum number of exits required by the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.

- 1. When more than one exit is required, an existing or newly constructed fire escape, complying with the following limitations, shall be accepted as providing one of the required means of egress unless determined by the authority having jurisdiction to be hazardous for use under emergency exiting conditions:
 - i. All occupants shall have unobstructed access to the fire escape without having to pass through a room subject to locking.
 - ii. Access to a fire escape shall be through a door, except that windows shall be permitted from single dwelling units or guest rooms in Use Groups R-1, R-2 and I-1 or when serving spaces having a maximum occupant load of 10 in other Use Groups.
 - iii. In all buildings of Use Group E, up to and including the 12th grade, buildings of Use Group I, rooming houses and child care centers, ladders of any type are prohibited on fire escapes used as a required means of egress.
 - iv. Newly constructed fire escapes shall be permitted only where exterior stairs cannot be utilized due to lot lines limiting stair size or due to the sidewalks, alleys, or roads at grade level. New fire escapes shall not incorporate ladders or access by windows.
- 5. Slidescapes or safety chutes shall be permitted as allowed by the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.
- 6. Except in buildings of Use Group I and in rooming houses and child care centers, a single exit is permitted in the story at the level of exit discharge when the occupant load of the story does not exceed 50 and the exit access travel distance does not exceed 75 feet.
- 7. In buildings of Use Group R-2 that are equipped throughout with an automatic fire sprinkler system, only one exit shall be required from basements or stories below grade.
- 8. In buildings of Use Group R-2 that are not equipped throughout with an automatic fire sprinkler system, a single exit shall be permitted from a basement or story below grade if every dwelling unit on that floor is equipped with an approved window providing a clear

- opening of at least five square feet in area, a minimum net clear opening of 24 inches in height and 20 inches in width, and a sill height of not more than 44 inches above the finished floor.
- 9. In multi-level dwelling units in buildings of Use Groups R-1 or R-2, an exit shall not be required from each level of the dwelling unit provided that the following conditions are met:
 - i. The building in which such dwelling units are contained is of Type 1 or Type 2 construction and the travel distance within the dwelling unit does not exceed 75 feet; or
 - ii. The building in which such dwelling units are contained is not more than three stories in height and all third floor space is part of one or more dwelling units located in part on the second floor and no habitable room within any such dwelling unit shall have a travel distance that exceeds 50 feet from the outside of the habitable room entrance door to the inside of the entrance door to the dwelling unit.
- **602.2.2 Mezzanines**: Mezzanines in the work area and with an occupant load of more than 50 or in which the travel distance to an exit exceeds 75 feet shall have access to at least two independent means of egress.

- 1. Two independent means of egress are not required where the travel distance to an exit does not exceed 100 feet and the building is protected throughout with an automatic sprinkler system.
- **602.2.3 Single exit buildings**: In buildings having only one exit, the single exit condition serving the work area shall be permitted to continue as follows:
 - 1. In buildings permitted to have a single exit in accordance with the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.
 - 2. In buildings of Use Group R-3.
 - 3. In buildings of Use Groups R-1 and R-2, from floors that are not more than 16 feet above exterior grade, except that in community residences for the developmentally disabled, the maximum occupant load, excluding staff, is 12.
 - 4. In buildings of Use Groups R-1 and R-2, not more than two stories in height, from floors that are more than 16 feet above exterior grade, when there are not more than four dwelling units per floor and the exit access travel distance does not exceed 50 feet, except that in community residences for the developmentally disabled, the maximum occupant load, excluding staff, is 12. The minimum fire resistance rating of the exit enclosure and of the opening protection shall be one hour.
 - 5. Any building of Use Group R-2 of three stories or less shall be permitted to have a single exit provided the following conditions are met:
 - i. The stairway is separated from the rest of the building by construction having a minimum fire resistance rating of one hour with self-closing one hour fire doors protecting all openings between the stair enclosure and the building, and
 - ii. The stairway does not serve more than one-half story below the level of exit discharge, and
 - iii. All corridors serving as access to exits from the work area have a minimum fire resistance rating of 20 minutes, and
 - iv. There is not more than 35 ft (10.7 m) of travel distance from the entrance door of any living unit in the work area to an exit, and
 - v. Twenty-minute fire resistance rated horizontal and vertical separation between living units in the work area is provided.
 - 6. In buildings of Use Group R-2 of any height with not more than four living units per floor, with a smokeproof enclosure or outside stair as an exit, and with such exit within 20-ft (6.1 m) of travel to the entrance doors to all living units served thereby.
 - 7. In buildings of Use Group B, F-2, or S-2, not more than two stories in height, which are not greater than 3,000 square feet per floor, when the exit access travel distance does not exceed 75

- feet. The minimum fire resistance rating of the exit enclosure and of the opening protection shall be one hour.
- 8. In open parking structures where vehicles are mechanically parked.
- **602.2.4** All buildings of Use Group A with an occupant load of 100 or more shall be provided with a main entrance capable of serving as the main exit with an egress capacity for at least one-half the total occupant load. The remaining exits shall be capable of providing one-half of the total required exit capacity.

- 1. As permitted by the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.
- **602.3** Capacity of Means of Egress: The capacity of the means of egress in each work area and throughout the egress path of each work area shall be sufficient for the occupant load thereof. Capacity shall be determined in accordance with the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1. The occupant load of a space shall be determined by whichever of the following methods provides the higher number
 - 1. Divide the floor area by the occupant load factor for this use group as provided in the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.
 - 2. The actual number of occupants for whom the work area is designed. Exception:
 - 1. The authority having jurisdiction shall be permitted to establish the occupant load as the number of persons for which existing means of egress is adequate, provided that measures are established to prevent occupancy by a greater number of persons.

602.4 Egress Doorways

602.4.1 In any work area, all rooms and spaces having an occupant load greater than 50 or in which the travel distance exceeds 75 feet shall have a minimum of two egress doorways.

Exceptions:

- 1. Storage rooms having a maximum occupant load of 10.
- 2. Where the work area is served by a single exit in accordance with 602.2.3.
- 3. Where a single means of egress is permitted by the Fire Prevention Code.
- **601.3.2** In buildings of Use Group I-2, any patient sleeping room or suite of rooms greater than 1,000 square feet in the work area shall have a minimum of two egress doorways. Exception:
 - 1. Where the room or suite of rooms is not greater than 2500 square feet and does not contain patient sleeping rooms, two egress doorways are not required.
- **602.4.3 Corridor doors**: Corridor doors in the work area shall not be constructed of hollow core wood and shall not contain louvers. All dwelling units, guest room or rooming unit corridor doors in work areas in buildings of Use Groups R-1, R-2, and I-l shall be at least 1-3/8 inch solid core wood or approved equal with approved door closers and shall not have any glass panels, other than approved wired glass or other approved glazing material in metal frames. All replacement doors shall be 1-3/4 inch solid bonded wood core or approved equal, unless the existing frame will accommodate only a 1-3/8 inch door.

- 1. Corridor doors within a dwelling unit or guestroom.
- 2. Existing doors meeting the requirements of HUD Rehabilitation Guidelines No. 8 for a rating of 15 minutes or better shall be accepted as meeting the provisions of this requirement.
- 3. Existing doors in buildings protected throughout with an approved automatic sprinkler system shall be required only to resist smoke; shall not contain louvers; and shall be reasonably tight fitting.

- 4. In group homes with a maximum of 15 occupants, and which are protected with an approved automatic detection system, closing devices may be omitted.
- 5. Door assemblies having a fire protection rating of at least 20 minutes.
- 6. Corridor doors complying with the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.
- **602.4.4--Transoms**: In all buildings of Use Group I-1, R-1 and R-2 all transoms in corridor walls in work areas shall be either glazed with 1/4-inch wired glass set in metal frames or other glazing assemblies having a fire protection rating as required for the door and permanently secured in the closed position or sealed with materials consistent with the corridor construction.

- 1. Where transoms are permitted by the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.
- **602.4.5 Other corridor openings**: In any work area, any other sash, grill or opening in a corridor, and any window in a corridor not opening to the outside air, shall be sealed with materials consistent with the corridor construction.
- **602.4.6** (Supplemental requirements): The requirements of 602.4.3 through 602.4.5 shall apply on the entire floor when the work area exceeds 50 percent of the floor area.
- **602.4.7 Door swing**: In the work area and in the egress path from any work area to the exit discharge, all egress doors serving an occupant load greater than 50 shall swing in the direction of exit travel.
- **602.4.8** In any work area all doors opening onto an exit passageway at grade or exit stair shall be self-closing or automatic closing by listed closing devices.

Exception:

- 1. Where exit enclosure is not required by the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.
- **602.4.9** In any work area, and in the egress path from any work area to the exit discharge, in a building or portions thereof of Use Groups A or E with an occupant load greater than 100 all required exit doors equipped with latching devices shall be equipped with approved panic hardware.
- **602.4.10** (**Supplemental requirements**): The requirements of 602.4.7 through 602.4.9 shall apply on the entire floor when the work area exceeds 50 percent of the floor area.

Exception:

- 1. Means of egress within a tenant space that is entirely outside the work area need not comply.
- **602.4.11** Work areas in buildings of Use Group I-3 having remote power unlocking capability for more than 10 locks shall be provided with an emergency power source for such locks. Power shall be arranged to automatically operate upon failure of normal power within 10 seconds and for a duration of not less than one hour.

Exception:

- 1. Locking arrangements complying with the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.
- **602.5 Dead End Corridors**: Existing dead end corridors in any work area shall not exceed 35 feet. Newly constructed dead end corridors shall comply with the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.

- 1. Where dead-end corridors of greater length are permitted by the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.
- 2. In other than Use Group A and H, the maximum length of an existing dead end corridor shall be 50 feet in buildings equipped throughout with an automatic fire alarm system installed in accordance

- with the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.
- 3. In other than Use Group A and H, the maximum length of an existing dead end corridor shall be 70 feet in buildings equipped throughout with an automatic sprinkler system installed in accordance with the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.
- 4. In other than Use Group A and H the maximum length of a newly constructed or extended dead end corridor shall not exceed 50 feet in buildings equipped throughout with an automatic sprinkler system installed in accordance with the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.

602.6 Means of Egress Lighting

- **602.6.1** Means of egress in all work areas shall be provided with artificial lighting in accordance with the requirements of the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.
- **602.6.2** (**Supplemental requirement**): Where the reconstruction work area, on any floor exceeds 50 percent of that floor area, means of egress throughout the floor shall be provided with artificial lighting in accordance with the requirements of the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.

Exception:

- 1. Means of egress within a tenant space that is entirely outside the work area need not comply.
- **602.6.3** (**Supplemental requirement**): In a building with work areas involving over 50 percent of the aggregate floor area within the building, means of egress from the floor of the highest work area to the floor of exit discharge, and all intermediate floors, shall be provided with artificial lighting within the exit enclosure in accordance with the requirements of the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.

602.7 Exit Signs

- **602.7.1** Means of egress in all work areas shall be provided with exit signs in accordance with the requirements of the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.
- **602.7.2** (**Supplemental requirement**): Where the reconstruction work area on any floor exceeds 50 percent of that floor area, means of egress throughout the floor shall be provided with exit signs in accordance with the requirements of the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.

- 1. Means of egress within a tenant space that is entirely outside the work area need not comply.
- **602.7.3** (**Supplemental requirement**): In a building with work areas involving over 50 percent of the aggregate floor area within the building, means of egress from the floor of the highest work area to the floor of exit discharge shall be provided with exit signs in accordance with the requirements of the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.
- **602.8 Handrails**: The following requirements shall apply from the highest work area floor to the level of exit discharge.
 - **602.8.1** Every required exit stairway that is part of the means of egress for any work area that has three or more risers and is not provided with at least one handrail, or in which the existing handrails are judged to

be in danger of collapsing, shall be provided with handrails for the full length of the run of steps on at least one side. All exit stairways with a required egress width of more than 66 inches shall have handrails on both sides.

- **602.8.2** Where there are no handrails or where the existing handrails must be replaced in accordance with Section 602.8.1, the handrails shall be designed and installed in accordance with the provisions of the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.
- **602.9 Guards**: The following requirements shall apply from the highest work area floor to the level of exit discharge, but shall be confined to the egress path of any work area.
 - **602.9.1** Every open portion of a stair, landing, or balcony that is more than 30 inches above the floor or grade below and not provided with guards, or those in which the existing guards are judged to be in danger of collapsing, shall be provided with guards.
 - **602.9.2** Where there are no guards or where the existing guards must be replaced in accordance with Section 602.9.1 the guards shall be designed and installed in accordance with the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.

603.0 Interior Finish

603.1 The interior finish of walls and ceilings in any work area shall comply with the requirements of the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1. All existing interior finish materials which do not comply with the requirements of this Section shall be removed or shall be treated with an approved fire retardant coating in accordance with the manufacturer's instructions to secure compliance with the requirements of this Section.

603.2 (Supplemental requirement)

603.2.1 Where the work area on any floor exceeds 50 percent of that floor area, the requirements of Section 603.1 shall apply to the interior finish in exits and corridors serving the work area on the entire floor.

Exception:

- 1. Interior finish within a tenant space that is entirely outside the work area need not comply.
- **603.2.2** In a building with work areas involving over 50 percent of the aggregate floor area within the building, the requirements for interior finishes in exits shall apply from the floor of the highest work area to the floor of exit discharge, and all intermediate floors.

604.0 Shaft Enclosures

- **604.1** In any work area, newly constructed vertical openings connecting two or more floors shall comply with the requirements of the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.
- **604.2** In any work area, all existing interior vertical openings connecting two or more floors shall be enclosed with approved assemblies having a fire resistance rating of not less than one hour with approved opening protectives.

- 1. Where vertical opening enclosure is not required by the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.
- 2. Interior vertical openings other than stairways may be blocked at the floor and ceiling of the work area by installation of not less than two inches (50.8 mm) of solid wood or equivalent construction.

- 3. In Use Groups A, B, M, and R-2 a minimum 30 minute enclosure shall be provided to protect all vertical openings not exceeding three stories.
- 4. In Use Group A the enclosure shall not be required:
 - i. Where connecting the main floor and mezzanines; or
 - ii. Where all the following conditions are met:
 - (1) The communicating area has a low hazard occupancy, or has a moderate hazard occupancy which is protected throughout by an automatic sprinkler system, and
 - (2) The lowest or next to the lowest level is a street floor; and
 - (3) The entire area is open and unobstructed in a manner such that it may be assumed that a fire in any part of the interconnected spaces will be readily obvious to all of the occupants; and
 - (4) Exit capacity is sufficient to provide egress simultaneously for all the occupants of all levels by considering all areas to be a single floor area for the determination of required exit capacity; and
 - (5) Each floor level, considered separately, has at least one-half of its individual required exit capacity provided by an exit or exits leading directly out of that level without having to traverse another communicating floor level or be exposed to the smoke or fire spreading from another communicating floor level.
- 6. In Use Group B the enclosure shall not be required in a building not exceeding 3,000 square feet per floor or when the building is protected throughout by an approved automatic sprinkler system.
- 7. In Use Group E the enclosure shall not be required for vertical openings not exceeding three stories when the building is protected throughout by an approved automatic sprinkler system.
- 8. In Use Group F the enclosure shall not be required for vertical openings not exceeding three stories:
 - i. In special purpose occupancies when necessary for manufacturing operations and direct access is provided to at least one protected stairway; or
 - ii. In buildings which are protected throughout by an approved automatic sprinkler system.
- 3. In Use Group H the enclosure shall not be required for vertical openings not exceeding three stories when necessary for manufacturing operations and every floor level has direct access to at least two remote enclosed stairways or other approved exits.
- 4. In Use Group M the enclosure shall not be required when:
 - i. Openings connect only two floor levels, such as between the street floor and mezzanine or second floor; or
 - ii. Occupancies are protected throughout by an approved automatic sprinkler system.
- 3. In Use Group R-1 the enclosure shall not be required for vertical openings not exceeding three stories:
 - In buildings which are protected throughout by an approved automatic sprinkler system;
 or
 - ii. In buildings with less than 25 guests in which the following conditions are met:
 - (1) Every sleeping room is provided with an approved window having a sill height not greater than 44 inches;
 - (2) Every sleeping room above the second floor is provided with direct access to a fire escape or other approved second exit;
 - (3) Any exit access corridor exceeding eight feet in length which serves two means of egress, at least one of which is an unprotected vertical opening, shall be separated from the vertical opening by a one-hour fire barrier; and
 - (4) The building is protected throughout by an automatic fire alarm system, installed and supervised in accordance with the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.
- 5. In Use Group R-2 the enclosure shall not be required:
 - i. In buildings which are protected throughout by an approved automatic sprinkler system;
 - ii. Where the vertical opening connects not more than two floor levels with not more than four dwelling units per floor and each dwelling unit has access to a fire escape or other approved second exit; or
 - iii. In buildings with not more than four dwelling units per floor, and in which the following conditions are met:

- (1) Every sleeping room is provided with an approved window having a sill height not greater than 44 inches;
- (2) Every dwelling unit or sleeping room above the second floor is provided with direct access to a fire escape or other approved second exit; and
- (3) The building is protected throughout by an automatic fire alarm system, installed and supervised in accordance with the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.

604.3 (Supplemental requirements)

- **604.3.1** Where the reconstruction work area on any floor exceeds 50 percent of that floor area, Section 604.2 shall apply throughout the floor.
- **604.3.2** Where the reconstruction work area on any floor exceeds 50 percent of that floor area, stairways that are part of the means of egress serving the work area shall be enclosed with smoke tight enclosures on all floors below the highest work area floor.

Exception:

- 1. Where stairway enclosure is not required by the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.
- **604.3.3** In a building with work areas involving over 50 percent of the aggregate floor area within the building, stairways that are part of the means of egress shall be enclosed in accordance with Section 604.2 on the highest work area floor and on all floors below it.

605.0 Fire Separation and Smoke Barriers

605.1 Use Group I-2

605.1.1 Where the work area is on a story used for sleeping purposes for more than 30 patients, the story shall be divided into not less than two compartments by smoke barrier walls complying with the technical requirements of Section 605.1.2 such that each compartment does not exceed 22,500 square feet and the travel distance from any point to reach a door in the required smoke barrier shall not exceed 200 feet.

- 1. Where neither the length nor width of the smoke compartment exceeds 150 feet, the travel distance to reach the smoke barrier door shall not be limited.
- **605.1.2** The smoke barriers specified in Section 605.1.1 shall be constructed in accordance with the following provisions:
 - 1. Smoke barriers shall have a fire resistance rating of not less than one-half hour and shall form an effective membrane continuous from outside wall to outside wall and from floor slab to floor or roof deck above, including continuity through all concealed spaces, such as those found above suspended ceilings, and including interstitial structural and mechanical spaces. Transfer grilles, whether equipped with fusible link-operated dampers or not, shall not be used in these partitions.
 - 2. Smoke barriers are not required in interstitial spaces when such spaces are designed and constructed with ceilings that provide resistance to the passage of fire and smoke equivalent to that provided by smoke barriers.
 - 3. Doors in smoke barriers shall have a fire protection rating of not less than 20 minutes when tested in accordance with ASTM E152 without the hose stream and labeled by an approved agency, or shall be 1-3/4 inch solid bonded wood core doors. Newly installed double egress corridor doors shall have approved vision panels. The doors shall close the openings with only the clearance necessary for proper operation under self-closing or automatic closing and shall be without undercuts, louvers or grilles. Rabbets or astragals are required at the meeting edges of newly installed double egress doors, and stops are required on the head and jambs of all doors in

- smoke barriers. Positive latching devices are not required on double egress corridor doors, and center mullions are prohibited.
- 4. Protection at the meeting edges of doors and stops at the head and sides of door frames shall not be required in buildings equipped with an approved engineered smoke control system. The engineered smoke control system shall respond automatically, preventing the transfer of smoke across the barrier.
- 5. Doors in smoke barriers shall be self-closing or shall be provided with approved door hold-open devices of the fail-safe type which shall release the doors causing them to close upon the actuation of smoke detectors as well as upon the application of a maximum manual pull of 50 pounds against the hold-open device.
- 6. An approved damper designed to resist the passage of smoke shall be provided at each point a duct penetrates a smoke barrier. The damper shall close upon detection of smoke by an approved smoke detector located within the duct.
- 7. In lieu of an approved smoke detector located within the duct, ducts which penetrate smoke barriers above doors are permitted to have the approved damper arranged to close upon detection of smoke on either side of the smoke barrier door opening.
- 8. Dampers are not required:
 - i. Where not required by the Building Code_or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.
 - ii. In buildings equipped with an approved engineered smoke control system.
 - iii. Where the openings in ducts are limited to a single smoke compartment and the ducts are of steel construction.
 - iv. In fully ducted systems where both sides of the smoke barrier are protected with an approved automatic sprinkler system.

605.2 Use Group R-3

605.2.1 Where the work area is in any attached dwelling unit in Use Group R-3, walls separating the dwelling units which are not continuous from the foundation to the underside of the roof sheathing shall be constructed to provide a continuous fire separation using construction materials consistent with the existing wall or complying with the requirements for new structures. All work shall be performed on the side of the wall of the dwelling unit that is part of the work area.

Exception:

1. Walls are not required to be continuous through concealed floor spaces.

1.606Fire Suppression Systems

606.1 All work areas in any building or portion thereof that is required to be suppressed in accordance with the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1 shall be provided with an automatic fire suppression system.

Exception:

1. In other than high rise structures, where an adequate water supply for sprinkler protection is not available the authority having jurisdiction shall be permitted to accept alternative protection.

606.2 (Supplemental requirements)

606.2.1 Where the work area on any floor exceeds 50 percent of that floor area, Section 606.1 shall apply to the entire floor.

- 1. In other than high rise structures, where an adequate water supply for sprinkler protection is not available the authority having jurisdiction shall be permitted to accept alternative protection.
- **606.2.2** In a building with work areas involving over 50 percent of the aggregate building area, Section 606.1 shall apply to the highest floor containing a work area and all floors below.

- **606.3 Mixed Uses**: In buildings containing mixed uses, one or more of which requires automatic suppression in accordance with Sections 606.1 or 606.2, suppression will not be required throughout the building, provided that the uses requiring suppression are separated from those not requiring suppression by fire resistive construction having a minimum two-hour rating for Use Group H, and a minimum one-hour rating for all use groups other than Use Group H.
- **606.4 Supervision**: Fire suppression systems required by this Section shall be supervised by one of the following methods as determined by the authority having jurisdiction:
 - 1. Approved central station system in accordance with NFPA 72;
 - 2. Approved proprietary system in accordance with NFPA 72;
 - 3. Approved remote station system of the jurisdiction in accordance with NFPA 72; or
 - 4. Approved local alarm service which will cause the sounding of an alarm in accordance with NFPA 72.

- i. Underground gate valve with roadway boxes;
- ii. Halogenated extinguishing systems;
- iii. Carbon dioxide extinguishing systems;
- iv. Dry and wet chemical extinguishing systems;
- v. Limited area sprinkler systems; and
- vi. Occupancies in Use Group R complying with NFPA 13R or NFPA 13D, as appropriate.
- **606.5 Standpipes**: Any work areas in a building that is required to be provided with a standpipe system by the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1 shall be provided with standpipes up to and including the highest work area floor. The standpipes shall be located and installed in accordance with the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.

Exceptions:

- 1. No pump shall be required provided that the standpipes are capable of accepting delivery by fire department apparatus of a minimum of 250 gpm at 65 psi to the topmost floor in buildings equipped throughout with an automatic sprinkler system or a minimum of 500 gpm at 65 psi to the topmost floor in all other buildings. Where the standpipe terminates below the topmost floor, the standpipe shall be designed to meet these requirements (gpm/psi) for possible future extension of the standpipe.
- 2. The interconnection of multiple standpipe risers shall not be required.

607.0 Fire Alarms

607.1 Smoke Detectors

- **607.1.1** In Use Groups R-1 and R-2, individual guestrooms and individual dwelling units in any work area shall be provided with smoke detectors complying with the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.
- **607.1.2** Where the reconstruction work area is in Use Groups R-3 or R-4, smoke detectors complying with the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1 shall be provided at each level and outside each sleeping area.

Exceptions:

- 1. Interconnection of smoke detectors shall not be required.
- 2. Battery-powered single station smoke detectors listed in accordance with UL 217 shall be permitted outside the work area.

607.2 Manual Fire Alarm Systems

607.2.1 Where the work area on any floor exceeds 50 percent of that floor area and the work area is in a building that is required to have a manual fire alarm system in accordance with the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1, a manual fire alarm

system shall be provided on the floor. Alarm-indicating appliances shall be provided on the floor and shall be automatically activated as required by the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1 by all new and existing initiating devices.

607.2.2 Where the work area involves over 50 percent of the aggregate building area and the work area is in a building that is required to have a manual fire alarm system in accordance with the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1, a manual fire alarm system shall be provided throughout the building in accordance with the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.

607.3 Automatic Fire Detection Systems

607.3.1 Where the work area is in a building that is required to have an automatic fire detection system in accordance with the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1, an automatic fire detection system shall be installed in the work area. Existing alarm-indicating appliances shall be automatically activated throughout the building. Where the building is not equipped with a fire alarm system, alarm-indicating appliances within the work area shall be provided and automatically activated.

Exception:

- 1. Where selective notification is permitted, alarm-indicating appliances shall be automatically activated in the areas selected.
- **607.3.2** Where the work area on any floor exceeds 50 percent of that floor area and the work area is in a building that is required to have an automatic fire detection system in accordance with the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1, an automatic fire detection system shall be installed throughout the floor. Alarm-indicating appliances shall be automatically activated throughout the building.

Exceptions:

- 1. Where selective notification is permitted, alarm-indicating appliances shall be automatically activated in the areas selected.
- 2. Where the building is not equipped with a fire alarm system, alarm indicating appliances on the floor shall be provided and automatically activated.
- **607.3.3** Where the work area involves over 50 percent of the aggregate building area and the building is required to have an automatic fire detection system in accordance with the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1, an automatic fire detection system shall be provided throughout the building in accordance with the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.

608.0 High Rise Buildings

- **608.1** Any building or structure having one or more floors more than 75 feet above the lowest level accessible to a fire department vehicle shall comply with the requirements of this section.
 - **608.1.1 Re-circulating Air or Exhaust Systems**: When the work area is on a floor that is served by a recirculating air or exhaust system serving more than one floor, the re-circulating air or exhaust system that serves the work area shall be equipped with approved smoke and heat detection devices installed in accordance with the Mechanical Code. The devices shall stop the fan(s) automatically and shall be of the manual reset type. Automatic fan shutdown is not required when the system is part of an approved smoke removal or smoke control system.
 - **608.1.2 Elevators**: When the work area is one entire floor or when the work area is 20 percent or more of the occupied floor area of the building, the elevators in the building shall be equipped with the following emergency control devices:

- 1. All automatic (non-designated attendant) elevators having a travel of 25 feet or more above or below the designated level shall be equipped with Phase I Emergency Recall Operation as required by ASME A17.1-1987, Rules 211.3a and 211.3b.
- 2. All floors shall be accessible by at least one elevator equipped with Phase II Emergency In-Car Operation, as required by ASME Al7.1-1987, Rule 211.3c.
- 3. All designated attendant elevators having a travel of 25 feet or more above or below the designated level shall be equipped with emergency controls, as required by ASME A17.1-1987, Rule 211.4.

608.1.3 Smoke Barriers: Where the work area on any floor exceeds 50 percent of that floor area and is on a floor that is above the main floor level in Use Groups R-1 and R-2, smoke barriers conforming to the requirements of Section 605.1.2 above shall be provided around all elevator landings on the work area floor.

Exceptions:

- 1. The smoke barriers shall be permitted to terminate at the ceiling, provided the ceiling membrane provides resistance to the passage of smoke equivalent to that provided by the smoke barriers.
- 2. The smoke barriers shall not be required in buildings protected throughout by an automatic sprinkler system.
- 3. The smoke barriers shall not be required in buildings provided with a smoke control system.

609.0 Boiler/Furnace Equipment Rooms

609.1 Boiler/furnace equipment rooms shall be enclosed by one-hour fire rated construction when the work area is in any of the following facilities: day nurseries, children's shelter facilities, residential child care facilities and similar facilities with children below the age of 2-1/2 years, and which may be classified as Use Group I-2, shelter facilities, residences for the developmentally disabled, group homes, teaching family homes, transitional living homes, rooming and boarding houses, hotels and multiple dwellings.

- 1. Furnace and boiler equipment of low pressure type (operating at pressures of 15 psig or less for steam equipment or 160 psig or less for hot water equipment) when installed in accordance with manufacturer recommendations or furnace and boiler equipment of residential (R-3) type (200,000 BTU per hour input rating or less) is not required to be enclosed.
- 2. Furnace rooms protected with automatic sprinkler protection.
- 3. Boiler/furnace equipment rooms protected in accordance with the Building Code or Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.
- **609.2** Emergency controls shall be provided in all structures classified as day nurseries, children's shelter facilities, residential child care facilities and similar facilities with children below the age of 2-1/2 years, and which may be classified as Use Group I-2, and in group homes, teaching family homes, and supervised transitional living homes in accordance with the following:
 - 1. Emergency shutoff switches for furnaces and boilers in basements must be at the top of the stairs leading to the basement;
 - 2. Emergency shutoff switches for furnaces and boilers in other enclosed rooms must be located outside of the room.

Maryland Rehab Code Chapter 7. Change of Occupancy

701.0 General

- **701.1** Any repair, renovation, modification, or reconstruction work undertaken in connection with a change of occupancy that does not involve a change of Use Group shall conform to the requirements of Chapters 3, 4, 5 and 6 respectively for the applicable Use Group.
- **701.2** The Use Group of an existing building or structure may be changed, provided the building or structure meets all the requirements of Chapter 6 applied throughout the building for the new Use Group, and the requirements of this Chapter.

Exceptions:

- 1. Compliance with all the provisions of Chapter 6 is not required where the change of use complies with the requirements of Section 701.11.
- 2. As modified in Section 905.0 for historic buildings.

701.3 Special Use and Occupancy

- **701.3.1** Where the character of use of an existing building or part of an existing building is changed to one of the following special use or occupancy categories as defined in Chapter 4 of the Building Code, the building shall comply with all the applicable requirements of that chapter or the Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1, regardless of whether a change of Use Group is involved:
- 1. covered mall buildings,
- 2. atriums,
- 3. private garages,
- 4. public garages,
- 5. motion picture projection rooms, screening rooms and sound stages,
- 6. stages and platforms,
- 7. special amusement buildings, and
- 8. HPM facilities.
- **701.3.2** An underground building in which there is a change of use shall comply with the requirements of the Building Code applicable to underground structures, or with the requirements of the Fire Prevention Code applicable to windowless buildings, as determined at the preliminary meeting described in Chapter 1.

700.4 Plumbing Requirements

- **701.4.1** Where the occupancy of an existing building or part of an existing building is changed such that the new occupancy is subject to increased or different plumbing fixture requirements or to increased water supply requirements in accordance with the Plumbing Code, the intent of the respective Plumbing Code provisions shall be complied with.
- **701.4.2** If the new occupancy is a food handling establishment, all existing sanitary waste lines above the food or drink preparation or storage areas shall be panned or otherwise protected to prevent leaking pipes or condensation on pipes from contaminating food or drink. New drainage lines shall not be installed above such areas, or shall be protected in accordance with the Plumbing Code.
- **701.4.3** If the new occupancy will produce grease or oil laden wastes, it shall be provided with interceptors as required in the Plumbing Code.
- **701.4.4** If the new occupancy will produce chemical wastes, the following shall apply:

- 1. If the existing piping is not compatible with the chemical waste, the waste shall be neutralized prior to entering the drainage system or the piping shall be changed to a compatible material.
- 2. No chemical waste shall discharge to a public sewer system without the approval of the sewage authority.
- **701.4.5** If the Use Group is changed to Use Group I-2, the plumbing system shall comply with the applicable requirements of the Plumbing Code.
- **701.5 Mechanical Requirements**: Where the occupancy of an existing building or part of an existing building is changed such that the new occupancy is subject to different kitchen exhaust requirements or to increased mechanical ventilation requirements in accordance with the Mechanical Code, the intent of the respective Mechanical Code provisions shall be complied with.

701.6 Electrical Requirements

- **701.6.1** Where the occupancy of an existing building or part of an existing building is changed to one of the following special occupancies as described in Chapter 5 of the Electrical Code, the electrical wiring and equipment of the building or portion thereof that contains the proposed occupancy shall comply with all applicable requirements of the Electrical Code regardless of whether a change of Use Group is involved:
 - 1. hazardous (classified) locations,
 - 2. commercial garages, repair and storage,
 - 3. aircraft hangars,
 - 4. gasoline dispensing and service stations,
 - 5. bulk storage plants,
 - 6. spray application, dipping and coating processes,
 - 7. health care facilities,
 - 8. places of assembly,
 - 9. theaters, audience areas of motion picture and television studios and similar locations,
 - 10. motion picture and television studios and similar locations,
 - 11. motion picture projectors, and
 - 12. agricultural buildings.
- **701.6.2** Where the occupancy of an existing building or part of an existing building is changed all unsafe conditions shall be corrected, without requiring that all parts of the electrical system be brought up to the current edition of the Electrical Code.
- **701.6.3** Where the occupancy of an existing building or part of an existing building is changed electrical service shall be upgraded to meet the requirements of the Electrical Code for the new occupancy.
- **701.6.4** Where the occupancy of an existing building or part of an existing building is changed the number of electrical outlets shall comply with the Electrical Code for the new occupancy.

701.7 Part Change of Use Group

701.7.1 Where a portion of an existing building is changed to a new Use Group, and that portion is not separated from the remainder of the building with fire separation assemblies having a fire resistance rating as required in Table 313.1.2 of the Building Code for the separate Use Groups, or with approved compliance alternatives, the entire building shall comply with all the requirements of Chapter 6 applied throughout the building for the new Use Group, and with the requirements of this Chapter.

Exception:

1. Compliance with all the provisions of Chapter 6 is not required when the change of use complies with the requirements of Section 701.11.

- **701.7.2** Where a portion of an existing building is changed to a new Use Group, and that portion is separated from the remainder of the building with fire separation assemblies having a fire resistance rating as required in Table 313.1.2 of the Building Code for the separate Use Groups, or with approved compliance alternatives, the portion changed shall comply with all the requirements of Chapter 6 for the new Use Group, and with the requirements of this Chapter. Exception:
- 1. Compliance with all the provisions of Chapter 6 is not required when the change of use complies with the requirements of Section 701.11.
- **701.8** Every change of use to one classified in a different Use Group shall require a new certificate of occupancy regardless of whether any renovations, modifications, or reconstruction work are required by this code.
- **701.9** Accessibility: Every building undergoing a change of occupancy shall comply with Section .07 A.(3), B., and C. of the Accessibility Code.
- **701.10 Hazard Category Classifications**: The relative degree of hazard between different Use Groups shall be as set forth in the hazard category classifications, Tables A through C of Section 702 and Table D of Section 703.
 - **701.10.1** An existing building or portion thereof may have its use changed to a Use Group within the same hazard classification category or to a Use Group in a lesser hazard classification category (higher number) in all three hazard category classifications designated in Tables A, B, and C and to any category in Table D except the highest classification, provided it complies with the provisions of Chapter 6 for the new Use Group, applied throughout the building, or portion thereof in accordance with Section 701.7.2, with Sections 703.1 (Live Loads) and 703.2 (Vertical Loads on Roofs), and with Sections 704.0 (Handrails and Guards) and 705.0 (Health and Hygiene).

- 1. Compliance with all the provisions of Chapter 6 is not required where the change of use complies with the requirements of Section 701.11.
- **701.10.2** An existing building shall comply with all the applicable requirements of this Chapter when a change in use will place it in a higher hazard category or when the use is changed within Use Group H.
- **701.10.3** An existing building may have its use changed to a higher hazard rating (lower number) in all three hazard category classifications designated in Tables A, B, and C provided it complies with this Chapter or with Section 3408.0 of the Building Code.
- **701.11** Change of Use to an Equal or Lesser Hazard: A change of use to a Use Group within the same hazard classification category or to a Use Group in a lesser hazard classification category (higher number) in the three hazard category classifications addressed by Tables A, B and C shall be permitted in an existing building or portion thereof provided the provisions of this section are met.
 - **701.11.1** Regardless of the Use Group involved, the following requirements shall be met:
 - 1. The capacity of the means of egress shall comply with Section 602.3.
 - 2. The interior finish of walls and ceilings shall comply with the requirements of Section 603.0.
 - 3. The high rise building requirements of Section 608.0 shall apply.
 - 4. The boiler/furnace room requirements of Section 609.0 shall apply.
 - **701.11.2** Where the new use is classified as Use Group I-1, R-1 or R-2, the following requirements shall be met:
 - 1. Corridor doors and transoms shall comply with the requirements of Sections 602.4.3 and 602.4.4.
 - 2. Fire suppression systems shall comply with the requirements of Section 606.0.
 - 3. Fire alarm systems shall comply with the requirements of Section 607.0.
 - 701.11.3 Where the new use is classified as Use Group I-2, the following requirements shall be met:

- 1. Egress doorways from patient sleeping rooms and suites of rooms shall comply with the requirements of Section 602.4.2.
- 2. Shaft enclosures shall comply with the requirements of Section 604.0.
- 3. Smoke barriers shall comply with the requirements of Section 605.1.
- 4. Fire suppression systems shall comply with the requirements of Section 606.0.
- 5. Fire alarm systems shall comply with the requirements of Section 607.0.

701.11.4 Where the new use is classified as Use Group I-3, the following requirements shall be met:

- 1. Locking of egress doors shall comply with the requirements of Section 602.4.11.
- 2. Shaft enclosures shall comply with the requirements of Section 604.0.
- 3. Fire suppression systems shall comply with the requirements of Section 606.0.
- 4. Fire alarm systems shall comply with the requirements of Section 607.0.

701.11.5 Where the new use is classified as Use Group R-3, the following requirements shall be met:

- 1. Dwelling unit separation shall comply with the requirements of Section 605.2.
- 2. The smoke detector requirements of Section 607.1 shall be met.

702.0 Fire and Life Safety

702.1 Means of Egress/General

Table A

HAZARD CATEGORIES AND CLASSIFICATIONS: LIFE SAFETY AND EXITS

RELATIVE HAZARD	USE CLASSIFICATION
1 (Highest Hazard)	Н
2	I-2, I-3
3	A, E, I-1, M, R-1, R-2
4	B, F-1, R-3, R-4, S-1
5 (Lowest Hazard)	F-2, S-2, U

702.1.1 When a change of use is made to a higher hazard category (lower number) as shown in Table A, all elements of the means of egress, including but not limited to the exit access, exit discharge, occupant load, corridors, doors, enclosures, stairs and ramps, guards and handrails, means of egress doorways, fire escapes and exit lighting and signs, shall comply with the requirements of Chapter 10 of the Building Code, or the applicable requirements of the Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.

- 1. Stairways shall be enclosed in compliance with applicable portions of Section 702.2.
- 2. Existing stairways including handrails and guards complying with the requirements of Chapter 6 shall be permitted for continued use subject to approval of the authority having jurisdiction.
- 3. Any stairway replacing an existing stairway within a space where, because of existing construction, the pitch or slope cannot be reduced, shall not be required to comply with the maximum riser height and minimum tread depth requirements.
- 4. Existing corridor walls constructed of wood lath and plaster in good condition or 1/2-inch-thick (12.7 mm) gypsum wallboard shall be permitted.
- 5. Existing corridor doorways, transoms and other corridor openings shall comply with the requirements in Sections 602.4.3, 602.4.4 and 602.4.5.
- 6. Existing dead end corridors shall comply with the requirements in Section 602.5.
- 7. An existing operable window with clear opening area no less than 4 square feet, and with minimum opening height and width of 22 inches and 20 inches respectively shall be accepted as an egress window.

702.1.2 When a change of use is made to an equal or lesser hazard category as show in Table A, existing elements of the means of egress shall comply with the requirements of Section 602.0 for the new Use Group. Newly constructed or configured means of egress shall comply with the requirements of Chapter 10 of the Building Code or the applicable requirements of the Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.

Exception:

- 1. Any stairway replacing an existing stairway within a space where, because of existing construction, the pitch or slope cannot be reduced, shall not be required to comply with the maximum riser height and minimum tread depth requirements.
- 2. Compliance with Section 602.0 is not required where the change of use complies with the requirements of Section 701.11.
- **702.1.3** Egress capacity shall meet or exceed the occupant load as specified in Section 602.0 if the change of use is to an equal or lesser hazard category when evaluated in accordance with Table A.

702.2 Enclosure of Vertical Shafts

- **702.2.1** Vertical shafts shall be designed to meet the Building Code or the Fire Prevention Code, requirements for atriums as determined at the preliminary meeting described in Chapter 1, or the requirements of this Section.
- **702.2.2 Stairways**: When a change of use is made to a higher hazard category as shown in Table A, interior stairways shall be enclosed as required by the Building Code or the Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.

Exceptions:

- 1. In other than Use Group I Occupancies, an enclosure shall not be required for openings serving only one adjacent floor and not connected with corridors or stairways serving other floors.
- 2. Unenclosed existing stairways need not be enclosed in a continuous vertical shaft if each story is separated from other stories by one-hour fire-resistive construction or approved wired glass set in steel frames and all exit corridors are sprinklered. The openings between the corridor and occupant space shall have at least one sprinkler head above the openings of the tenant side. The sprinkler system shall be permitted to be supplied from the domestic water-supply systems, provided the system is of adequate pressure, capacity and sizing for the combined domestic and sprinkler requirements.
- 3. Existing penetrations of stairway enclosures shall be accepted if they are properly protected in accordance with the Building Code or the Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.
- **702.2.3 Other vertical shafts**: Interior vertical shafts other than stairways, including but not limited to elevator hoistways and service and utility shafts, shall be enclosed as required by the Building Code or the Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1 when there is a change of use to a higher hazard category in Table A.

- 1. Existing one-hour interior shaft enclosures shall be accepted where a higher rating is required.
- 2. Vertical openings, other than stairways, need not be enclosed if the entire building is provided with an approved automatic sprinkler system.
- 3. Where one-hour fire-resistive floor construction is required, vertical shafts need not be enclosed where floor penetrations are fire stopped at every floor level.
- **702.2.4 Openings**: All openings into existing vertical shaft enclosures shall be protected by fire assemblies having a fire-protection rating of not less than one hour and shall be maintained self-closing or shall be automatic closing by actuation of a smoke detector. All other openings shall be fire protected in

an approved manner. Existing fusible link-type automatic door-closing devices shall be permitted in all shafts except stairways if the fusible link rating does not exceed 135°F. (75°C.).

R rating does not have a second and the second and

702.3 Heights and Areas

Table B

HAZARD CATEGORIES AND CLASSIFICATIONS: HEIGHTS AND AREAS

RELATIVE HAZARD	USE CLASSIFICATION
1 (Highest Hazard)	A-2, H, I-3
2	A-1, A-3, A-4, E, I-1, I-2, S-1
3	B, F-1, M, R
4 (Lowest Hazard)	F-2, S-2, U

702.3.1 Where a change of use is made to a higher hazard category as shown in Table B, heights and areas of buildings and structures shall meet the limitations of Chapter 5 of the Building Code for the new Use Group.

Exception:

- 1. A 1-story building changed into Use Group E shall not be required to meet the area limitations of the Building Code.
- 2. Where a change of use to a higher hazard category is to Use Group A or I-2, heights of buildings and structures shall meet the limitations of Chapter 5 of the Building Code or of the Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1, for the new Use Group.
- **702.3.2** When a change of use is made to an equal or lesser hazard category as shown in Table B, the height and area of the existing building shall be deemed to be acceptable.
- **702.3.3 Fire separation assemblies**: When a change of use is made to a higher hazard category as shown in Table B, fire separation assemblies in mixed use buildings shall comply with the requirements for Mixed Use Groups in the Building Code.

Exception:

1. Where the fire separation assemblies are required to have a one-hour fire resistance rating, existing wood lath and plaster in good condition or existing 1/2-inch-thick (12.7 mm) gypsum wallboard shall be permitted.

702.4 Exterior Wall Fire Resistance Ratings

Table C

HAZARD CATEGORIES AND CLASSIFICATIONS: EXPOSURE OF EXTERIOR WALLS

RELATIVE HAZARD	USE CLASSIFICATION
1 (Highest Hazard)	Н
2	F-1, M, S-1
3	A, B, E, I, R
4 (Lowest Hazard)	F-2, S-2, U

702.4.1 Where a change of use is made to a higher hazard category as shown in Table C, exterior walls shall have fire resistance and exterior opening protectives as required in Chapter 7 of the Building Code. This provision shall not apply to walls at right angles to the property line. Exception:

- 1. Where a fire resistance rating greater than two hours is required for a building of any type of construction, existing noncombustible exterior walls having a fire resistance rating equivalent to two hours as determined by *HUD Rehabilitation Guidelines/1980 No. 8*, or other approved sources, shall be accepted, provided the building does not exceed three stories in height and is classified as one of the following Use Groups: A-3 with an occupant load of less than 300, B, F, M, or S.
- **701.3.2** When a change of use is made to an equal or lesser hazard category as shown in Table C, existing exterior walls, including openings, shall be accepted.
- **702.4.3 Opening protectives**: Openings in exterior walls shall be protected as required by the Building Code. When openings in the exterior walls are required to be protected due to distance from the property line, the sum of the area of such openings shall not exceed 50 percent of the total area of the wall in each story.

- 1. Where the Building Code permits openings in excess of 50 percent.
- 2. Protected openings shall not be required in buildings of Use Group R which do not exceed three stories in height and which are located not less than 3 feet (914 mm) from the property line.
- 3. Where exterior opening protectives are required, an automatic sprinkler system throughout may be substituted for opening protection.
- 4. Exterior opening protectives are not required when the change of occupancy is to an equal or lower hazard classification in accordance with Table C.

703.0 Structural Safety

703.1 Live Loads: Any existing structure in which the proposed new occupancy requires floor live loads equal to or less than required for the existing occupancy is permitted to be continued in use for the originally approved live loads, provided that the structure is not dangerous and is adequate for the proposed occupancy. If the approved live load is less than required by Chapter 16 of the Building Code, the areas designed for the reduced live load shall be posted with the approved load or shall be structurally strengthened to support the new load. Placards shall be of an approved design.

Exception:

- 1. Analysis and test methods for evaluation of existing materials shall be permitted to use the methods specified in the code under which the building was constructed, the current Building Code, or other standards as approved by the authority having jurisdiction.
- **703.2 Vertical Loads on Roofs**: Buildings and structures shall comply with the roof load requirements of Chapter 16 of the Building Code for roof live load.

Exception:

- 1. Existing roofs shall be permitted to be retained provided any unsafe or overloaded conditions are corrected and where the roof dead load is not increased by use, re-roofing or added equipment.
- **703.3 Wind and Snow Loads**: Where a change of occupancy results in an existing building being assigned a higher wind load or snow load importance factor in accordance with Chapter 16 of the Building Code, the building shall be strengthened to meet the Building Code wind load or snow load requirements, respectively, for new buildings.
- **703.4 Earthquake Loads**: Where a change of occupancy results in an existing building being reclassified to a higher hazard category as shown in Table D, the building shall be strengthened to meet the Building Code seismic requirements for new buildings.

Exceptions:

1. For buildings located in seismic map areas having an effective peak velocity-related acceleration (A_v) value of less than 0. 15 (applicable throughout the state of Maryland), strengthening the building to meet the seismic requirements for new buildings is required only where the change of occupancy

results in a building being reclassified to hazard category 1 (highest). All other buildings so located shall not be required to be strengthened.

Table D SEISMIC HAZARD CATEGORIES

RELATIVE HAZARD		USE CLASSIFICATION
1 (Highest Hazard)		H-1, H-4 with highly toxic materials
		I-2 (hospitals)
		B (fire, rescue, and police stations)
		B (emergency preparedness centers)
		B (primary communication facilities)
		S (post-earthquake recovery vehicle garages)
		F (power-generating stations and other utility facilities
	_	required for emergency backup)
2	Λ	A, E, I-1, I-2 (all others), I-3, H-2, H-3
		F (power-generating stations and other public utilities
		not listed in Relative Hazard 1)
		B (used for adult education with an occupant load >
		500)
		Any building with an occupant load > 5000
3		R-1, R-2
4		F-1, S-1, H-4
5		B (all others), F-2, M (all others), S-2
6 (Lowest Hazard)		R-3, U

704.0 Handrails and Guards

- 704.1 Handrails: Existing stairways shall comply with the handrail requirements in Section 602.8.
- 704.2 Guardrails: Existing guardrails shall comply with the guardrail requirements in Section 602.9.

705.0 Health and Hygiene

705.1 Light and Ventilation: Light and ventilation shall comply with the requirements of Chapter 12 of the Building Code for the new Use Group.

706.0 Energy Conservation

706.1 A change of use that would require an increase in space conditioning energy use in an existing building or structure that was constructed under an Energy Code shall not be permitted unless such building or structure is made to comply with the thermal envelope requirements of the Energy Code under which it was constructed for the new Use Group.

Maryland Rehab Code Chapter 8. Additions

801.0 General Requirements

- **801.1** An addition to a building or structure shall comply with the Building Code, Mechanical Code, Plumbing Code, Fire Prevention Code, Electrical Code, Boiler Safety Code, Energy Code, Elevator Code, and Accessibility Code, without requiring the existing building or structure to comply with any requirements of those codes or of this code.
- **801.2** An addition shall not create or extend any non-conformity in the existing building to which the addition is constructed with regard to accessibility, structural strength, fire safety, means of egress, or the capacity of mechanical, plumbing or electrical systems.
- **801.3** Any repair, renovation, alteration or reconstruction work within an existing building to which an addition is being made shall comply with the requirements of Chapters 3, 4, 5 and 6 respectively of this code.

802.0 Heights and Areas

802.1 No addition shall increase the height of an existing building beyond that permitted under the applicable provisions of Chapter 5 of the Building Code for new buildings unless fire separation as required in the Building Code is provided.

Exceptions:

- 1. Existing one and two story buildings shall be permitted to be expanded beyond what is permitted by up to 25 percent of the existing floor area, not to exceed an area of 125 percent of that permitted by the Building Code, without providing fire separation.
- 2. Infilling of floor openings, non-occupiable appendages such as elevator and exit stair shafts, and the addition of mezzanines and equipment penthouses shall be permitted beyond that permitted by the Building Code.
- **802.2 Fire Protection Systems**: Existing fire areas increased by the addition shall comply with Chapter 9 of the Building Code or with the Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.

803.0 Structural Loads

- **803.1** An addition shall not impose loads that would cause the existing building to be subject to stresses exceeding those permitted by the Building Code.
- **803.2** An addition shall not increase the stress in any structural element of the existing building or structure by more than 5 percent, unless the increased stress on the element is still in compliance with the Building Code for new structures

804.0 Smoke Detectors in Use Groups R-3 and R-4

- **804.1** Whenever an addition is made to a building or structure of Use Group R-3 or R-4, hardwired, interconnected smoke detectors meeting the requirements of the Building Code or the Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1, shall be installed and maintained in the addition.
- 803.2 Whenever an addition is made to a building or structure of Use Group R-3 or R-4, the existing building shall be provided with smoke detectors as required by the Building Code or the Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1.

805.0 Accessibility

805.1 Additions shall comply with Section .07 A.(3), B., and C. of the Accessibility Code..

806.0 Energy Conservation

806.1 Additions to existing buildings or structures may be made to such buildings or structures without making the entire building or structure comply with the requirements of the Energy Code. The addition shall conform to the requirements of the Energy Code as they relate to new construction only, provided that allowable amount of glass in the addition shall be based on the area of the entire building.

807.0 Plumbing

807.1 In areas where public sanitary sewers are not available, existing structures that are being enlarged shall either permanently plug all existing floor drains, or retrofit all existing floor drains so as to allow them to flow into and approved sand interceptor which shall drain into a 1,000 gallon or larger approved holding tank.



Maryland Rehab Code Chapter 9. Historic Buildings

901.0 General

- **901.1** Historic buildings shall comply with the provisions of this Chapter, or with the provisions of Chapters 3, 4, 5, 6 and 7, relating to their repair, renovation, modification, reconstruction, movement and change of occupancy.
- **901.2 Alternatives**: A historic building undergoing repair, renovation, modification, reconstruction or change of occupancy shall be investigated and evaluated. If it is intended that the building meet the requirements of this chapter, a written report shall be prepared for such a building and filed with the authority having jurisdiction by a registered design professional. Such report shall be in accordance with Chapter 1 of this code and shall identify each required safety feature in compliance with this chapter and where compliance with other chapters of this code would be damaging to the contributing historic features. In addition, the report shall describe each feature not in compliance with this code and demonstrate how the intent of this code is complied with in providing an equivalent level of safety. The State Historic Preservation Officer and the local preservation official may review and comment on the written report.
- **901.3** Accessibility Requirements: The accessibility requirements contained in this code shall apply to historic buildings undergoing renovations, modifications, reconstruction or a change of occupancy. If the historic character of the building is adversely affected, then alternative provisions of accessibility shall be permitted, in accordance with Section 05.02.02.09 of the Accessibility Code.
- **901.4 Special Occupancy Exceptions House Museums**: When a building that is in Use Group R-3 is also used for A, B, or M purposes such as museum tours, exhibits and other public assembly activities, the authority having jurisdiction may make a determination that the Use Group is B when life safety can be demonstrated in accordance with Section 901.2. Adequate means of egress in such buildings, which may include a means of maintaining doors in an open position to permit egress, a limit on building occupancy to an occupant load permitted by the means of egress capacity, a limit on occupancy of certain areas or floors, and/or supervision by a person knowledgeable in the emergency exiting procedures, shall be provided.

902.0 Repairs

902.1 Repairs to any portion of a historic building or structure shall be permitted to be made with original or like materials and original methods of construction, subject to the provisions of this Chapter.

903.0 Relocated Buildings

- **903.1 Construction**: Any repair, renovation, modification, reconstruction, movement and change of use of relocated historic structures shall comply with the requirements of this Chapter.
- **903.2 Foundations**: Foundations of relocated historic buildings and structures shall comply with the Building Code. Relocated historic buildings shall otherwise be considered as historic buildings for the purposes of this code.
- **903.3** Relocated historic buildings and structures shall be so sited that fire separation distance and opening protectives comply with the requirements of the Building Code.

904.0 Repair, Renovation, Modification or Reconstruction

- **904.1 General**: Historic buildings undergoing repair, renovation, modification or reconstruction shall comply with all of the applicable requirements of Chapters 3, 4, 5 and 6 of this code except as specifically permitted in this Chapter.
- **904.2 Replacement**: Replacement of existing or missing features using original or like materials shall be permitted. Partial replacement for repairs that match the original in configuration, height and size shall be

permitted. Such replacements shall not be required to meet the materials and methods requirements in Section 401.2 of this code.

Exception:

- 1. Replacement glazing in hazardous locations shall comply with the Safety Glazing requirements of Chapter 24 of the Building Code.
- **904.3 Roof Covering**: The existing type of roof covering shall be permitted to be continued and replaced with the same materials if the historic materials are documented to the satisfaction of the authority having jurisdiction.
- **904.4 Means of Egress**: Existing door openings and corridor and stairway widths of less than those that would be acceptable for non-historic buildings under this code shall be approved, provided that in the opinion of the authority having jurisdiction there is sufficient width and height for a person to pass through the opening or traverse the exit and that the capacity of the exit system is adequate for the occupant load or where other operational controls to limit occupancy are approved by the authority having jurisdiction.
- **904.5 Door Swing**: When approved by the authority having jurisdiction, the existing front doors need not swing in the direction of exit travel, provided other approved exits having sufficient capacity to serve the total occupant load are provided.
- **904.6 Transoms**: In fully sprinklered buildings of Use Group I-1, R-1 and R-2 existing transoms in corridors and other fire rated walls may be maintained if fixed in the closed position. A sprinkler shall be installed on each side of the transom.
- **904.7 Interior Finishes**: The existing finishes of walls and ceilings shall be accepted where it is demonstrated that it is the historic finish.

904.8 Stairway Enclosure

- **904.8.1** Stairway enclosures may be omitted in a historic building where such stairway serves only one adjacent floor.
- **904.8.2** In buildings of three stories or less, exit enclosure construction shall limit the spread of smoke by the use of tight fitting doors and solid elements. Such elements need not have a fire rating.
- **904.9 One-Hour Fire-resistive Assemblies**: Where one-hour fire-resistive construction is required by this code, it need not be provided regardless of construction or occupancy where the existing wall and ceiling finish is wood lath and plaster.
- **904.10 Stairway Railing**: Grand stairways shall be accepted without complying with the handrail and guardrail requirements. Existing handrails and guards shall be permitted to remain provided they are not structurally dangerous.
- **904.11 Exit Signs**: The authority having jurisdiction shall accept alternate exit sign or egress path marking location where such signs or markings would have an adverse effect upon the historic character. Alternative signs shall identify the exits and egress path.
- **904.12 Sprinkler Alternative**: Every historic building which does not conform to the construction requirements specified in other chapters of this code for the occupancy or use and which, in the opinion of the authority having jurisdiction, constitutes a fire safety hazard shall be equipped throughout with an automatic sprinkler system installed in accordance with the Building Code or the Fire Prevention Code, as determined at the preliminary meeting described in Chapter 1. However, such automatic sprinkler system shall not be used to substitute for, or act as an alternate to, the required number of exits from any facility.

905.0 Change of Occupancy

- **905.1** General: Historic buildings undergoing a change of occupancy shall comply with the applicable provisions of Chapter 7 except as specifically permitted in this Chapter. Where Chapter 7 requires compliance with specific requirements of Chapter 6, and where those requirements are subject to exceptions in Section 904.0, the same exceptions shall apply in this section.
- **905.2 Building Area**: The allowable floor area for historic buildings undergoing a change of occupancy shall be permitted to exceed the allowable areas specified in Chapter 7 by twenty percent.
- **905.3** Location on Property: Historic structures undergoing a change of use to a higher hazard category in accordance with Section 702.4.1 of this code may use alternative methods to comply with the fire-resistance and exterior opening protective requirements. Such alternatives shall comply with Section 901.2.
- **905.4 Roof Covering**: Regardless of occupancy or use group, roof-covering materials not less than Class C shall be permitted where a fire-retardant roof covering is required.
- **905.5 Means of Egress**: Existing door openings and corridor and stairway widths of less than those that would be acceptable for non-historic buildings under this code shall be approved, provided that in the opinion of the authority having jurisdiction there is sufficient width and height for a person to pass through the opening or traverse the exit and that the capacity of the exit system is adequate for the occupant load, or where other operational controls to limit occupancy are approved by the authority having jurisdiction.
- **905.6 Door Swing**: When approved by the authority having jurisdiction, the existing front doors need not swing in the direction of exit travel, provided other approved exits having sufficient capacity to serve the total occupant load are provided.
- **905.7 Transoms**: In corridor walls required to be fire rated by this code, existing transoms, may be maintained if fixed in the closed position and fixed wired glass set in a steel frame or other approved glazing shall be installed on one side of the transom.

Exception:

- 1. Transoms conforming to Section 904.6 of this code shall be accepted.
- **905.8 Finishes**: Where finish materials are required to have a flame-spread classification of Class III or better, existing nonconforming materials shall be surfaced with an approved fire-retardant paint or finish.

- Existing nonconforming materials need not be surfaced with an approved fire-retardant paint or
 finish when the building is equipped throughout with an automatic fire suppression system installed
 in accordance with the Building Code or the Fire Prevention Code, as determined at the preliminary
 meeting described in Chapter 1, and the nonconforming materials can be substantiated as historic in
 character.
- **905.9 One-Hour Fire-resistive Assemblies**: Where one-hour fire-resistive construction is required by this code, it need not be provided regardless of construction or occupancy where the existing wall and ceiling finish is wood lath and plaster.
- **905.10 Stairs and Railing**: Existing stairways shall comply with the requirements of this code. The authority having jurisdiction shall grant alternatives for grand stairways and railings if alternative stairways are found to be acceptable or if judged as meeting the intent of this code. Existing stairways shall comply with Section 904.10.
- **905.11 Exit Signs**: The authority having jurisdiction may accept alternate exit sign locations where such signs would have an adverse effect upon the historic character. Such signs shall identify the exits and exit path.
- **905.12** Exit Stair Live Load: Existing historic stairways in buildings changed to Use Groups R-1 and R-2 shall be accepted where it can be shown that the stairway can support a 75 pounds per square foot live load.

905.13 Natural Light: When it is determined by the authority having jurisdiction that compliance with the natural light requirements of Section 705.1 will lead to loss of historic character and/or historic materials in the building, the existing level of natural lighting shall be considered acceptable.

905.14 Energy Conservation: Historic buildings are exempt from the requirements of Section 706.0.

R A F T